AMENDMENTS TO THE CLAIMS

Claims 1-15 (cancelled).

16. (New) A method for visualizing data from a data set, comprising:

retrieving a plurality of data records from the data set, wherein each record includes a plurality of fields,

automatically detecting a data range for each of at least a plurality of the fields in the data records retrieved from the data set,

automatically assigning a display query device to each of the plurality of fields,

displaying a graphical visualization of relationships between at least a subset of the data records retrieved from the data set,

sensing adjustment by the user of one or more of the query devices, and

updating the graphical visualization based on adjustments of the query devices sensed in the step of sensing.

17. (New) The method of claim 16 wherein the step of automatically assigning a query device to each of the plurality of fields automatically assigns at least one graphical query device that responds to at least one graphical primary user input action that corresponds to a value of one the fields and responds to at least one non-graphical, secondary user input action corresponding to a value of one of the fields.

18. (New) The method of claim 16 wherein the step of automatically assigning a query device to each of the plurality of fields automatically assigns at least one query device that includes a slider.

19. (New) The method of claim 18 wherein the step of automatically assigning a query device to each of the plurality of fields automatically assigns at least one query device that includes a plurality of sliders for selecting a range of one of the fields.

20. (New) The method of claim 16 wherein the step of automatically assigning a query device to each of the plurality of fields automatically assigns at least one query device that

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includes a scale that is based on a data range detected in the step of automatically detecting a data range.

21. (New) The method of claim 16 further including the step of automatically detecting a data type for at least the plurality of fields and wherein the step of automatically assigning automatically assigns at least some of the query devices based on results of the step of automatically detecting a data type.

22. (New) The method of claim 21 wherein the step of automatically assigning a display query device automatically assigns one of a plurality of types of query device in response to the step of automatically detecting a data type.

23. (New) The method of claim 21 wherein the step of automatically detecting a data type detects field names from the data set.

24. (New) The method of claim 16 wherein the step of automatically assigning a display query device assigns one of a plurality of different types of query device in response to the step of automatically detecting a data range.

25. (New) The method of claim 16 wherein the step of automatically assigning a display query device assigns one of a plurality of different types of query device in response to user input.

26. (New) The method of claim 16 wherein the step of displaying a visualization displays a visualization that shows a relationship between an independent field and a plurality of dependent fields and further including a step of selecting one of the fields to assign to be the independent field.

27. (New) The method of claim 26 wherein the step of selecting one of the fields to assign to be the independent field is based on user input.

28. (New) The method of claim 26 wherein the step of selecting one of the fields to assign to be the independent field is automatic.

29. (New) The method of claim 16 wherein the data set is stored in a database.

30. (New) The method of claim 16 wherein the data set is stored in a data set file.

31. (New) The method of claim 16 wherein the assignments made in the step of automatically assigning are user-changeable.

32. (New) The method of claim 16 wherein the visualization includes an X-Y plot.

33. (New) The method of claim 16 wherein the visualization includes a bar graph.

34. (New) The method of claim 16 wherein the visualization includes a pie chart.

35. (New) A system for visualizing data from a data set, comprising:
storage for the data set,
a channel to access the storage,
a user input device,
a display device, and
a main processing system connected through the channel for communication with the stored data set in the storage, the main processing system being operative to:

retrieve a plurality of data records from the data set through the channel, wherein each record includes a plurality of fields,

automatically detect a data range for each of at least a plurality of the fields in the data records retrieved from the data set,

automatically assign a display query device to each of the plurality of fields,

display on the display device a graphical visualization of relationships between at least a subset of the data records retrieved from the data set,

sense adjustment by the user using of one or more of the query devices by means of the user input device, and

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update the graphical visualization on the display device based on adjustments of the query devices.

36. (New) A system for visualizing data from a data set, comprising:

means for retrieving a plurality of data records from the data set, wherein each record includes a plurality of fields,

means for automatically detecting a data range for each of at least a plurality of the fields in the data records retrieved from the data set,

means for automatically assigning a display query device to each of the plurality of fields,

means for displaying a graphical visualization of relationships between at least a subset of the data records retrieved from the data set,

means for sensing adjustment by the user of one or more of the query devices, and

means for updating the graphical visualization based on adjustments of the query devices sensed by the means for sensing.